KRATOCHWILL, Ede, dr.

Otorhinolaryngological aspects of poliomyelitis. Ful orr gegegyogy. no.4:97-102 Nov 55.

1. Az Orszagos Reuma es Furdougyi Intezet Ful-, Orr-, Gegeosztalyanak (foorvos: Kratochwill Ede dr.) kozlemenye.

(POLIOMYELITIS, BULBAR
relation to tonsillectomy)
(POLIOMYELITIS, BULBAR, complications
resp. paralysis, diag. & indic. for trachaotomy)
(TONSILS, surgery, relation to bulbar polio.)
(TRACHEA, surgery
tracheotomy in resp. paralysis, value & indic.)

KRATOCHWILL EDE, dr.

Clinical picture and therapy of reflex esophagitis. Ful orr gegegyogy. no.2:74-78 July 57.

1. Az Orszagos es Furdougyi Intezet Ful-orr-gegeosztalyanak (foorvos: Kratochwill Ede dr.) kozlemenye.
(ESOPHAGUS, dis.
reflux esophagitis. sympt., diag. & ther. (Hun))

BORTNOWSKI, Roman; OSMAN, Henryk; KRATOCHWIL, Wladzimierz

Mechanized draws for the elimination of surface defects in the finishing part of the rolling mill for semifinished quality steel products. Problemy proj hut maszyn 13 no.5.129-138 My '65.

1. Biprohut, Warsaw.

HUNGARY

KRATOCHWILL, Ede, Dr; National Institute for Rheumatology and Balneology, Ear-Nose-Throat Department (Orszagos Rheuma es Furdougyi Intezet, Ful-orr-gegeosztaly).

"Results of a Surgical Procedure Using Interposition for Otosclerosis."

Budapest, Orvosi Hetilap, Vol 104, No 23, 9 June 63, pages 1084-1087.

Abstract: [Author's Hungarian summary modified] Results of 33 cases of surgery for the improvement of the hearing of otosclerotic patients are given. The technique of the Ruedi clinic in Zurich, (fenestratio foraminis ovalis et interpositio parietis venae) was followed. The author considers this procedure to be the most effective one. 3 Hungarian, 30 Western references.

1/1

KRATOCHWIL, Zygmunt

Surgical treatment of neurofibromatosis of face. Nowotwory 12 no.3: 239-245 '62.

1. Z Wojewodzkiego Szpitala Chirurgii Plastycznej w Polanicy-Zdroju Kierownik: dr M. Krauss.
(NEUROFIBROMATOSIS) (FACIAL NEOPLASMS)

POLAND

KRATOCHWIL, Zygmunt, Wojewodztwo Hospital of Plastic Surgery (Wojewodzki Szpital Chirurgii Plastycznoj) in Polanica-Zdroj (Director: Michal KRAUSS)

"On Skin Transplants by the Revedin and Davis Method."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 33, 12 Aug 63, pp 1225-1226

Abstract: [Author's English summary] Author reports on bad, both functionally and cosmetically, results obtained by covering large skin defects with focal transplants by the method of Revedin or Davis. Badly healing and granulating wounds or hypertrophic scars appeared in the places where skin flaps were taken by the Davis method, and skin transplants cannot be taken again from these places. There are no references.

1/1

POLAND

KRATOCHWIL, Zygmund, Wojewodztwo Hospital of Plastic Surgery (Wojewodzki Szpital Chirurgii Plastycznej) in Polanica-Zdroj

"On Polish Medical Nomenclature ("Plastic" or "Creative" Surgery?)."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 35, 26 Aug 63, pp 1319-1320

Abstract: Discussion of the two terms "plastic" and "wytworcza" (creative) as pertaining to surgery, derivations of the two terms (Greek vs Polish), some of the outstanding advocates of each and their arguments, and recommendation for the use of "plastic," as both more correct and conforming with international use. There are no references.

1/1

KRATOHVIL, J.

(3)

"Measuring coagulation processes. IV. Coagulation values of neutral electrolytes in mixtures water-alcohol for the negative sols of silver chloride in the nascent state. B. Težak and J. Kratohvil (Fac. Sci., Zagreb, Yugoslavia). *Arhiv Kem.* 24, T-10(1952)(English summary); cf. C.A. 46, 9942g.—0.002*N* $AgNO_3$ and 0.002*N* HCl were caused to react with each other in the presence of KNO$_3$, $Ba(NO_3)_2$, and $La(NO_3)_3$, 0.002*N* in solns. in H_2O which contained 0, 30, 50, 70, and 87% by wt. EtOH, and the Tyndall effect was measured after 10 min. with green light. In other expts. the concn. of the HCl was changed to 0.00022, 0.001, 0.005, and 0.006*N*. The critical concns. were obtained by extrapolation of the Ib-min. ppth. curve to zero turbidity. Bjerrum's crit. distance $d_c = z's'e^2/2DkT$, where z' and s' are the valencies of the ions, e is charge of the ion in electrostatic units, D dielec. const. of the medium, k Boltzmann const., and T abs. temp., is a function of the corresponding critical concns. for the coagulation.

Werner Jacobson

KRATOHVIL, J.

Solubility of silver bromide in aqueous solution of potassium bromide and silver nitrate at 20°. V. B. Vouk, J. Kratohvil, and B. Težak (Univ. Zagreb, Croatia). *Arhiv Kem.* 25, 210–24 (1953) (in English). The solubilities of AgBr at 20° in aq. solns. of KBr and $AgNO_3$ were measured by observing the disappearance of the solid phase either turbidimetrically or by the discontinuity in the plot of absorbance at 230 or 245 mμ vs. concn. No solid phase is present at the following *M* concns. of KBr and $AgNO_3$: 3.55, 0.010; 2.70, 0.010; 1.73, 0.003; 1.00, 4.0×10^{-4}; 0.40, 1×10^{-4}; 0.028, 1×10^{-4}; 0.001, 1×10^{-4}; 1×10^{-4}, 1×10^{-4}; 0.01, 4.05; 0.001, 2.01; 1×10^{-4}, 0.93; 1×10^{-4}, 0.42; 1×10^{-4}, 0.115. Four regions of soly. are found: ppta., ionic soly., complex soly. of AgBr in KBr, and complex soly. of AgBr in $AgNO_3$. The soly. product for AgBr at 20° is 1×10^{-12}.

K. G. Stone

KRATOHVIL, J

KRATOHVIL, J.

The precipitation processes as indicators for methodic structures. The effect of mixture of electrolytes of solvents and of colloid substances. Boško Težak, E. Matijević, K. Schulz, J. Kratohvil, F. Wolf, and B. Cernicki (Univ. Zagreb, Yugoslav.). *J. Colloid Sci.* 1954, Suppl. 1, 118–27; cf. *C.A.* 47, 6210i.—The characteristic max. and crit. limits encountered in detg. the aggregation of inorg. salts of low soly. in the presence of electrolytes can be used to obtain an insight into the structures of the methodical (i.e., interboundary) layer between crystal and soln. Examples given are: (1) the antagonistic action of mixts. of $La(NO_3)_3$ with KNO_3, K_2SO_4, $Mg(NO_3)_2$, or $MgSO_4$ in the pptn. of AgBr or AgI sols; (2) the effect of dioxane on the ability of KNO_3, $Ba(NO_3)_2$, and $La(NO_3)_3$ to coagulate AgBr sols; and (3) the effect of small amts. of AgI on the pptn. of AgBr or AgCl sols.

H. K. Livingston

4

KRATOHVIL, J.

The complex solubility and the composition of aqueous complex solutions of silver halides and silver thiocyanate. J. Kratohvil, B. Jeřak, and V. B. Vouk (Univ. Zagreb, Yugoslavia). *Arkiv kemi*. 26, 101-20(1954)(In English).—A systematization and comparison of the numerous data on complex soly. of Ag halides and AgSCN obtained by various techniques was made. The results are represented as plots of the log of the total concn. of Ag ions *vs.* the log of the total concn. of halide or SCN^- ions at the soly. boundaries (so-called soly. curves). Satisfactory agreement between the data of various authors was noted. Except in the ionic soly. regions, the effect of the ionic strength was small or completely absent. Complex soly. of AgCl in solns. of various sol. chlorides increases in the order $NH_4Cl > KCl \approx LiCl > NaCl > HCl$ and $BaCl_2 > SrCl_2 > CaCl_2 > MgCl_2$. The effect of the accompanying cation from chloride component decreases with the increasing dilu. of the solns. This was tentatively connected with the steric factors. The complex soly. in the solns. of the corresponding sol. halide or SCN^- salts (for amts. of solid phase greater than $10^{-4}M$) changes in the order $AgSCN > AgI > AgBr > AgCl$. Increase of the complex soly. in the solns. of $AgNO_3$ is in the order $AgI > AgSCN > AgBr > AgCl$. A higher concn. of Ag ions is necessary for dissolving the same amt. of solid phase than for halide or SCN ions. In order to evaluate the compn. of the complex solns. and to det. the constitution of the sol. complex species and their stability consts. in the various concn. ranges, a direct graphic method was elaborated.

The soly. curves could be approximated by a series of secants, whose slopes were in all cases only slightly different from small whole nos. (0 to 4). The values of the slopes of the secants represent the no. of ligands, minus one, bound to the central ion in a mononuclear complex. The segments of the secants on the ordinate represent the equil. consts. of soln. of solid phase and the formation consts. of the corresponding complexes, resp. The stability const. of a complex is equal to the ratio of the corresponding equil. const. and the soly. product. At high concns. of the component in excess the formation of polynuclear complexes is assumed. By the procedure described the complex soly. results were interpreted and the stability consts. of the complex ions compared with the conclusions of other authors. Extensive tables including the authors, the references, the concn. ranges of the component in excess, the compns. of the complex ions present, and the corresponding stability consts. are given. Essentially the same results were reached by various authors. The reliability of the interpretation of the soly. data is discussed. J. Kratohvil

YUGOSLAVIA/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical Analysis. Phase Transitions B-8

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26150

Author : J. Kratohvil, B. Tezak
Title : Methodics of Precipitation Processes. XI. Complex Solubility of Silver Complex Halides and Silver Thiocyanate in Mixed Solvents

Orig Pub : Arhiv kemije, 1954, 26, No 4, 243-256

Abstract : The solubility (L) of AgCl, AgBr, AgI and AgCNS in solutions of halides and thiocyanates of alkali metals in isodielectric mixtures (water - methyl alcohol, water - ethyl alcohol, water - acetone) at 20 ± 0.1° was studied. This process is accompanied by the formation of complexes in the solution. L increases with the increase of the concentration of the organic component, and this increase means that less halide ions containing in the complex are necessary to the solution of the same amount of the solid phase. In mixtures of substances of equal dielectric constants (water - methyl alcohol,

Card : 1/3

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26150

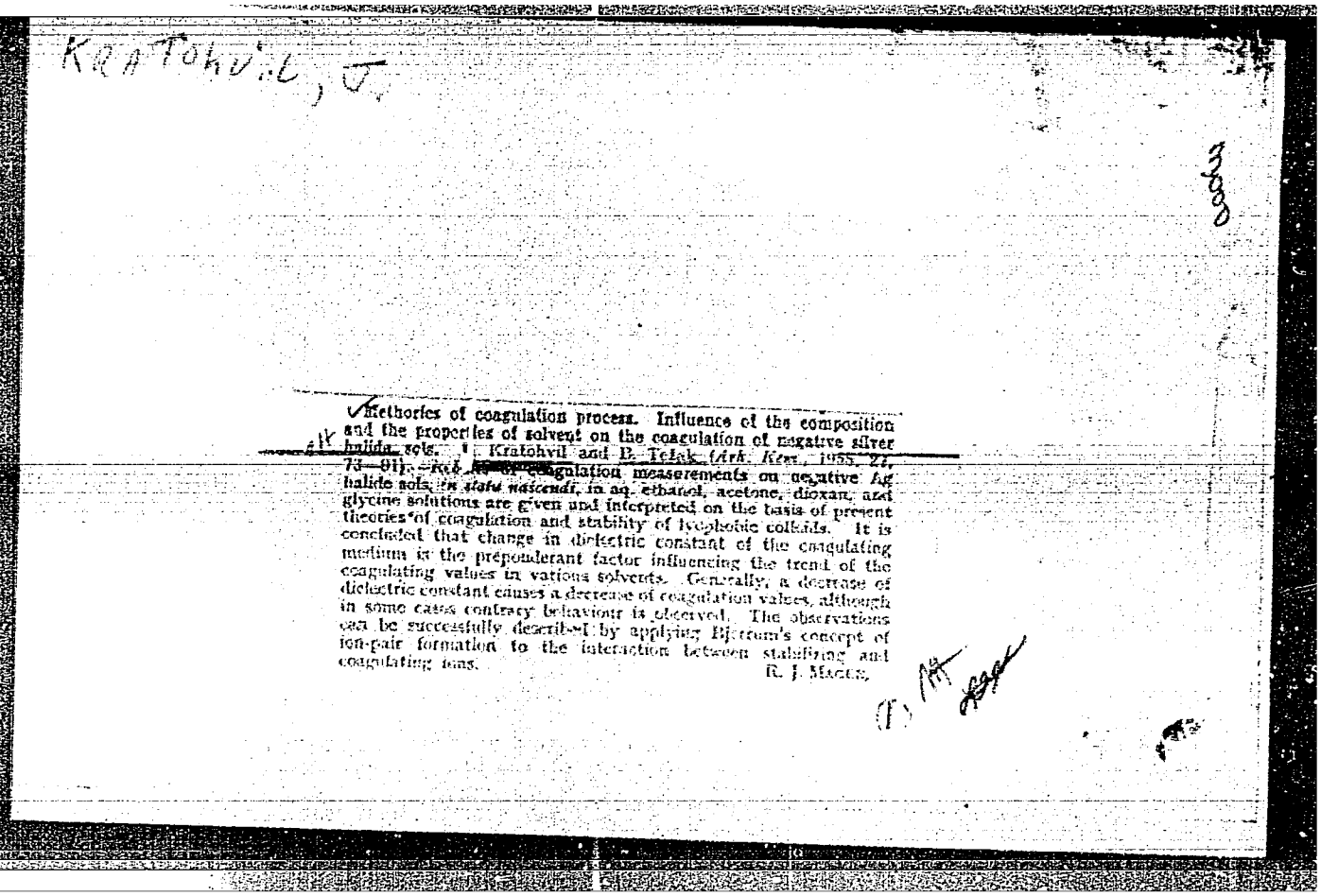
water - ethyl alcohol), L increases approximately regularly (compared with L in pure water); water - acetone mixtures, in which L is noticeably greater, is an exception. The difference between L of AgBr in solutions of KBr and NaBr is conserved also at the dissolution in mixed solvents. L of silver halides and thiocyanate decreases in all solvents (including water) in the following order: AgCNS, AgI, AgBr, AgCl. L in 82% acetone is an exception, it decreases in the following order: AgI, AgCNS, AgBr, AgCl. The anomaly of water-acetone mixtures is connected with the change in the ion-dipole interraction (formation of solvates). The less the dielectric constant of the solvent is, the greater is the magnitude of the stability constant of the complex. The dielectric constants and the compositions of mixtures were computed by interpolation basing on data published earlier (Akerlof G., J. Amer. Chem. Soc., 1932, 54, 4125). The values of ion solubility at various magnitudes of the dielectric constants

YUGOSLAVIA/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical Analysis. Phase Transitions. B-8

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26150

necessary to the computation of the constants of stability were obtained by means of the relation published earlier (Ricci J.E. and others, J. Amer. Chem. Soc., 1939, 61, 3274; 1940, 62, 407; J. Phys. Chem., 1941, 45, 1096; J. Amer. Chem. Soc., 1942, 64, 2305). The stability constants were computed by the method described earlier (RZhKhim, 1955, 26012). The methodics of the work was published earlier (Schulz K. and others, Arkhiv kem., 1951, 23, 200). See RZh Khim, 1955, 26012 for part X.

Card : 3/3



Kratohvil, J.

388

Methories of coagulation process. Influence of the composition and the properties of solvent on the coagulation of negative silver halide sols. J. Kratohvil and D. Tešak (*Arh. Kem.*, 1955, 27, 73—91).—Rapid coagulation measurements on negative Ag halide sols, *in statu nascendi*, in aq. ethanol, acetone, dioxan, and glycine solutions are given and interpreted on the basis of present theories of coagulation and stability of lyophobic colloids. It is concluded that change in dielectric constant of the coagulating medium is the preponderant factor influencing the trend of the coagulating values in various solvents. Generally, a decrease of dielectric constant causes a decrease of coagulation values, although in some cases contrary behaviour is observed. The observations can be successfully described by applying Bjerrum's concept of ion-pair formation to the interaction between stabilizing and coagulating ions.

R. J. Myers.

(1) MF

Kratohvil, J.

A note on the preparation and optical properties of monodispersed lead iodate hydrosols. J. Herak, M. M. Herak, B. Tefak, and J. Kratohvil (Univ. Zagreb, Yugoslavia). *Arhiv Kem.* 27, 117–18(1955)(Ger. English).—Monodispersed $Pb(IO_3)_2$ hydrosols were prepd. by slowly pouring the soln. of KIO_3 into an equal vol. of $Pb(NO_3)_2$ soln. Concns. of about 0.001–0.003*N* were most convenient. The growth of $Pb(IO_3)_2$ particles was very fast and after a few min. the sols exhibited Tyndall spectra of the scattered light as brilliant as those of La Mer's sulfur sol (La M. and Barnes, *C.A.* 40, 3038⁵) after 24 hrs. A plot of the ratio of the intensity of scattered light at 4360 and 3660 A. for various angles of observation shows characteristic orders of Tyndall spectra. The way of mixing of pptg. components had great influence on the optical phenomena, although Tyndall spectra always appeared. The sols were not stable; after about 15 min. sedimentation took place and the color bands began to disappear. The addn. of gelatin (0.1 to 1%) or filtration through ordinary filter paper immediately after mixing stabilized the sols. The radius of $Pb(IO_3)_2$ particles detd. by the sedimentation method of Johnson and La Mer (*C.A.* 41, 5767c) amounted in one case to 8000A. The appearance of Tyndall spectra was also observed on $AgIO_3$ and $La(IO_3)_3$ hydrosols, but to a lesser extent. J. K.

(3)

KRATOHVIL, J.

9

The influence of the composition and the properties of the solvent on complex formation between silver and chloride, bromide, iodide, and thiocyanate ions. J. Kratohvil and B. Težak (Univ. Zagreb, Croatia, Yugoslavia). Rec. trav. chim. 73, 724-30(1954)(in English).—To study the effect of the dielec. const. of the medium on complex formation, the complex solubilities of AgCl, AgBr, AgI, and AgSCN in halide or thiocyanate solns. in isodielec. mixts. of water and MeOH, EtOH, iso-PrOH, glycerol, dioxane, and acetone were detd. The complex soly. of the ppts. increased relative to that in water, with increasing concn. of the org. component in solns. The lowering of the dielec. const. of the medium caused an increase in the stability of the complex ions tested.

Sidney Arden

KRATOHVIL, J.

YUGOSLAVIA/Physical Chemistry - Thermodynamics, Thermochemistry, B.
Equilibria, Physical-Chemical Analysis, Phase
Transitions.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 45954

Author : XV: J. Kratohvil, B. Tezak. XVI: M.M. Herak, M.J. Herak, J. Kratohvil

Inst :
Title : Methodics of the Precipitation Process. XV. Some Further Experiments on the Influence of the Solvent on the Complex Solubility of Silver Halides and Silver Thiocyanate. XVI. A Study of the Precipitation of Sparingly Soluble Metal Iodates.

Orig Pub : Croat. chem. acta, 1957, 29, No 2, 63-66; 67-72

Abstract : XV. The solubility of AgCl, AgBr, AgI and AgCNS in halide or thiocyanate solutions in binary isodielectric mixtures of water with n-propanol, isopropanol. ethyleneglycol, glycerin and dioxane was studied.

Card 1/3

YUGOSLAVIA/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions. B.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 45954

The methods of work were descirbed formerly (Arhiv, kem., 1951, 23, 200). All the measurements were carried out at 20°. The solubility rise with the complex formation is approximately the same in the cases of isodielectric water-alcohol mixtures independently of the used alcohol. Dioxane produces a somewhat different effect. The obtained data were compared with the data published formerly (report XIV, RZhKhim, 1958, 641).

XVI. The process of Ag, Pb and La iodate precipitation from aqueous solutions of electrolytes was studied and the concentration ranges, in which their separation proceeded in the solid phase, were investigated. The concentrations, at which the precipitation takes place, agree with the data of other authors (RZhKhim, 1955, 26012; 1957, 22335, 50711) only in the case of $AgIO_3$.

Card 2/3

YUGOSLAVIA/Optics - K-

Abs Jour : Ref Zhur Fizika, No 3, 1960, 7126

Author : Herak, M.J., Kratohvil, J., Herak, M.M., Wrischer, M.

Inst : The University, Zagreb, Yugoslavia

Title : A Light Scattering and Electron Microscope Examination of Monodispersed Metal Iodate Hydrosols

Orig Pub : Croat. chem. acta, 1958, (1959), 30, No 4, 221-230

Abstract : A simple procedure was used to obtain monodispersed hydrosols of lead iodate and lanthanum iodate. In observing the scattering of light by hydrosols, bright colored fringes are seen (the Tyndall spectrum of high order) indicating high monodispersness of the system and spherical shape of the particles. The lead iodate is unstable, and this phenomenon can be observed in it after mixing the solution only for 10 - 15 minutes. For longer

Card 1/2

Abs Jour : Ref Zhur Fizika, No 3, 1960, 7126

measurements, the lead iodate was stabilized by filtration. Using a corresponding photometer, the angular distribution of the scattered radiation was measured. This distribution is characterized by the existence of sharp maxima at definite angles of observation. The dimensions of the scattering particles were estimated by a method described by Lamer and Johnson and also from the results of measurements made by an ordinary and an electron microscope. The average radius of the particles in the lanthanum iodate is 700 Å, and in the lead iodate it is 800 Å. The question of the mechanism of production of monodispersed hydrozol of metal iodate and concerning the shape of the particles is discussed.
Bibliography, 19 titles. -- N.A. Voyshvillo

KRATOHVIL, J

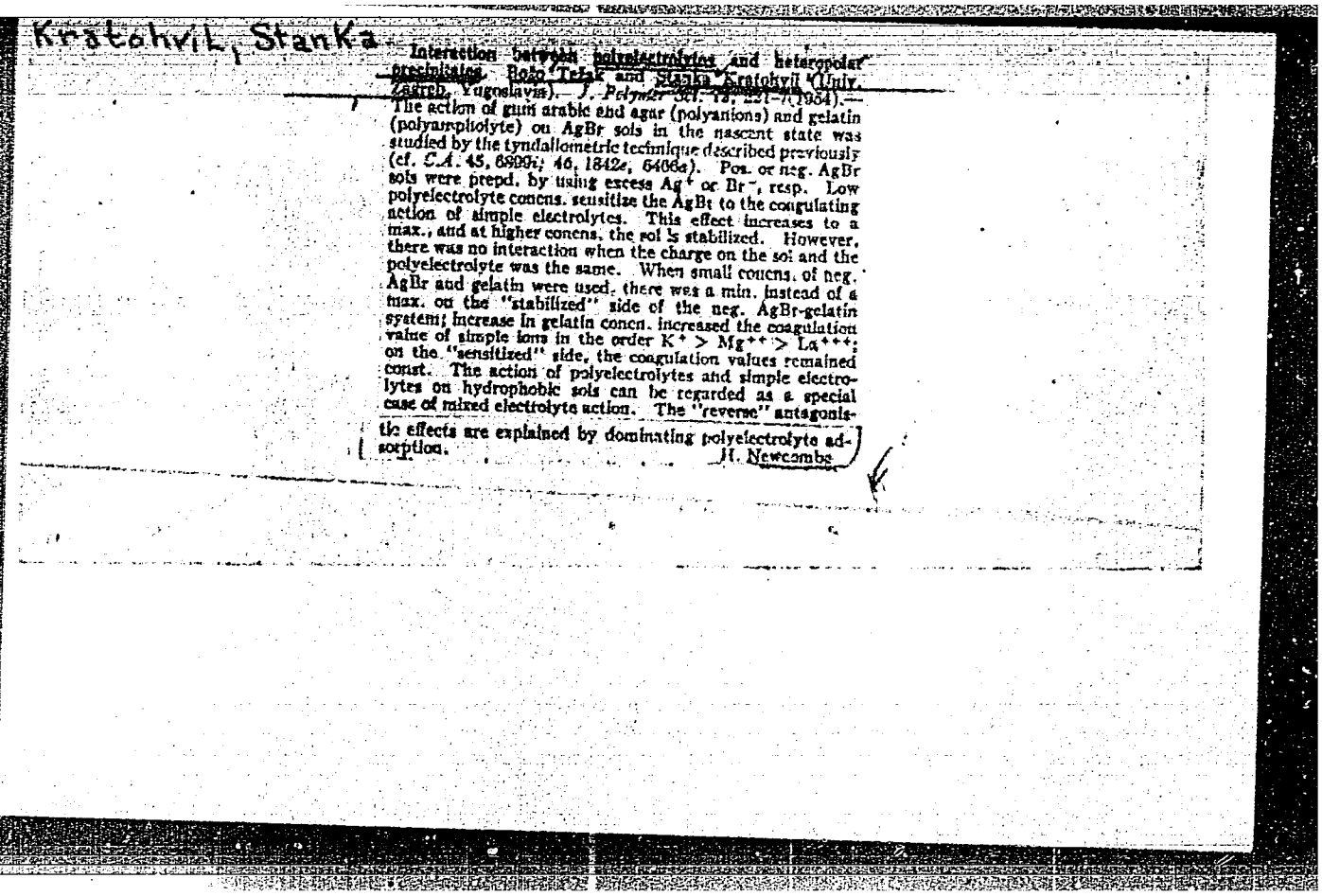
5

The refractive-index increment of dextran for the molecular-weight determination by light scattering. V. M. Zebec, Gj. Deželić, J. Kratohvil, and K. F. Schulz (Univ. Zagreb, Yugoslavia). *Croat. Chem. Acta* 30, 261–5 (1958) (in English).—On comparing published data for the increment, dn/dc, of dextran in water, considerable differences were noted at wave length 546 mμ. These differences may cause serious errors in calcg. mol. wts. of dextran from light-scattering measurements. The following values for dn/dc were found (in cc./g.): 0.1518 ± 0.0012 for 436 mμ, 0.1431 ± 0.0013 for 546 mμ, and 0.1476 ± 0.0013 for 578 mμ. These values agree very closely with the mean values published in the literature. J. Kratohvil

ZEBEC, M.; DEZELIC, Gj.; DEZELIC, N.; KRATOHVIL, J.P.

Physicochemical studies of dextran. I. Characterization of clinical samples. Croat chem acta 36 no.1:13-26 '64.

1. Department of Applied Biochemistry, Andrija Stampar School of Public Health, Faculty of Medicine, University of Zagreb, Zagreb. Present address: Clarkson College of Technology, Potsdam, New York, U.S.A. (for Kratohvil); present address: Fuels Branch Research Council of Alberta, Edmonton, Alberta, Canada (for Shuls).



Kratohvil, Stanka

Interaction between polyelectrolytes and heteropolar precipitates. Boško Težak and Stanka Kratohvil (Univ. Zagreb, Yugoslavia). *J. Polymer Sci.* 13, 351–7 (1954).—The action of gum arabic and agar (polyanions) and gelatin (polyampholyte) on AgBr sols in the nascent state was studied by the tyndallometric technique described previously (cf. *C.A.* 45, 6899*i*; 46, 1842*e*, 6466*a*). Pos. or neg. AgBr sols were prepd. by using excess Ag^+ or Br^-, resp. Low polyelectrolyte concns. sensitize the AgBr to the coagulating action of simple electrolytes. This effect increases to a max., and at higher concns. the sol is stabilized. However, there was no interaction when the charge on the sol and the polyelectrolyte was the same. When small concns. of neg. AgBr and gelatin were used, there was a min. instead of a max. on the "stabilized" side of the neg. AgBr-gelatin system; increase in gelatin concn. increased the coagulation value of simple ions in the order $K^+ > Mg^{++} > La^{+++}$; on the "sensitized" side, the coagulation values remained const. The action of polyelectrolytes and simple electrolytes on hydrophobic sols can be regarded as a special case of mixed electrolyte action. The "reverse" antagonistic effects are explained by dominating polyelectrolyte adsorption.

H. Newcombe

KRATOHVIL, S.

The behavior of several slightly soluble salts in an aqueous gelatin medium. Bogo Težak, Ranko Wolf, and Stanko Kratohvil (Univ. Zagreb, Yugoslavia). *J. chim. phys.* 55, 307–14(1958).—The effect of gelatin on the aq. systems (I) $Ag_2Cr_2O_7$ + NaCl + HNO_3 and (II) $FeCl_3$ + NaCl + HCl or NaOH was investigated. Small changes in the concn. of one of the components can make a pronounced change in the structure of the system. An attempt is made to represent the various crit. parameters in a 3-dimensional model for system II. C. J. Ulteé

KRATOHVIL-BABIC, S.

Tezak, B. Kratohvil-Babic, S.
"The effect of gelatin on crystallizing and coagulating processes in precipitation."
p. 47.

(Arhiv Za Kemiju, Vol. 24, 1952, Zagreb)

SO: Monthly List of East European Accessions, Vol. 2, No. 9, Library of Congress, September 1953, Uncl.

KRATOKHVIL', N. I.

USSR/Medicine - Infectious Diseases Nov 53

"Isolation of the Causative Factor of Listerellosis from Common Field Mice and Ixodes ricinus Ticks," N. I. Kratokhvil', Plavsk Antitularemia Sta

Zhur Mikro, Epid, i Immun, No 11, pp 60-61

Describes isolation of Listeria monocytogenes from common field mice (Microtus arvalis) and sexually mature Ixodes ricinus ticks. Expresses the opinion that antitularemia stations may, in addition to their regular duties, locate natural foci of listerillosis and warn medical workers whenever the possibility of outbreaks of human listerellosis is present.

271T43

KRATOKHVIL', N.I.

Some data on the effect of epizootic tularemia on the city population of house mice. Zool.zhur. 32 no.3:549-550 My-Je '53. (MLRA 6:6)
(Mice) (Tularemia)

MYASNIKOV, Yu.A.; KRATOKHVIL', N.I.; YANSON, V.N.

Effect of tularemia epidemics on the murine rodent population. Zool.zhur. 32 no.6:1270-1275 N-D '53. (MLRA 6:12)

1. Protivotulyaremiynyye stantsii Ministerstva zdravookhraneniya Rossiyskoy Sotsialisticheskoy Federativnoy Sovetskoy Respubliki.
(Tularemia) (Rodentia--Diseases)

KRATOKHVIL', N.I.

Case of isolation of the causative agent of erysipeloid from sexually mature ticks Ixodes ricinus. Zhur.mikrobiol.epid.i immun. no.3:61-63 Mr '54. (MLRA 7:4)

1. Iz Plavskoy protivotulyaremiynoy stantsii.
(Erysipelothrix rhusiopathiae) (Ticks as carriers of contagion)

OLSUF'YEV, N.G.; TSVETKOVA, Ye.M.; BORODIN, V.P.; KOROLEVA, A.P.; SIL'CHENKO, V.S.; KHOROSHEV, I.G.; MYASNIKOV, Yu.A.; PERFIL'YEVA, Z.A.; KRATOKHVIL' M.I.; VAYSTIKH, M.A.; RAVDONIKAS, O.V.; BARANOVA, N.K.; ZIMINA, V.Ye.; TORMASOVA, L.N.; USTIN-PETROVA, T.F.; AREF'YEV, S.S.; KONKINA, N.S.; KUL'BA, A.P.; MAL'TSEVA, N.K.; SHELANOVA, G.M.; SORINA, A.M.; BRANITSKAYA, V.S.; PRUDNIKOVA, M.N.

Tularin from a vaccinal strain for epicutaneous use. Zhur. mikrobiol.epid. i immun. 27 no.9:22-28 S '56. (MLRA 9:10)

1. Iz Instituta epidemiologii i mikrobiologii im. N.F.Gamelei AMN SSSR i protivotuliaremiynykh stantsiy Stalingradskoy, Voronezhskoy, Tul'skoy, Plavskoy, Omskoy, Krasnodarskoy, Moskovskoy i Smolenskoy.
(TULAREMIA, diagnosis,
tularin epicutaneous test (Rus))

RUZHECHKA, Ch.; KRATOSHKA, Y.

Readers' letters. Shvein. prom. no.1:30-31 Ja-F '63.
(MIRA 16:4)

(Clothing industry)

KRATOSKA, K.

Analytical records and their utilization for analyzing the activities and kinds of labor in machine-tractor stations. p. 222. (Mechanisace Zemedelstvi, Vol. 7, No. 10, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

KRATOSKA, K.

Cost analysis in machine-stractor centers. p. 273.

Praha. MECHANISACE ZEMEDELSTVI. Vol. 9, no. 12, Dec. 1959
Praha, Czechoslovakia

Monthly list of East European Accession (EEAI) LC Vol. 9, no. 2
Feb. 1960. Unc.

KRATOSKA, Karel

Introduction of the new regulations on granting bonuses to regular workers of machine tractor stations. Prace mzda 11 no.8:369-371 Ag '63.

SALENKO, D.; KRATOV, F.

Successes of workers of the Belgorod-Dnestrovskiy Mill No.12. Muk.-elev.prom. 20 no.7:31 Jl '54. (MLRA 7:8)

1. Belgorod-Dnestrovskaya mel'nitsa No.12. (Belgorod-Dnestrovskiy--Flour mills) (Flour mills--Belgorod-Dnestrovskiy)

SALENKO, D.; KRATOV, F.

Towards the 20th Congress of the Soviet Communist Party. Muk.
-elev.prom. 21 no.10:29 O '55. (MLRA 9:1)

1.Mel'nitsa no.12 v Belgorode-Dnestrovskom.
(Belgorod-Dnestrovskii--Flour mills)

ZLATOV, F., inzhener.

Efficiency promoters' proposals at a mill. Muk.-elev.prom. 23 no.7:24-25 Jl '57. (MLRA 10:9)

1. Belgorod-Dnestrovskaya mel'nitsa No.12.
(Flour mills--Equipment and supplies)

KRATOV, F., inzh.

At the Belgorod-Dnestrovskiy Flour Mill. F.Kratov. Muk.-elev. prom. 24 no.3:19-20 Mr '58. (MIRA 12:9)

1. Belgorod-Dnestrovskaya mel'nitsa No.12.
(Belgorod-Dnestrovskiy--Flour mills)

KRATOV, F., inzh.

Improve the work and increase the productivity of labor. Muk-elev.prom. 25 no.1:11-12 Ja '59. (MIRA 12:3)

1. Mel'nitsa No.12 v Belgorod-Dnestrovskom.
(Belgorod-Dnestrovskiy--Flour mills)

KRATOV, F.; KARAVANOV, V.

For a higher level of production mechanization. Muk.-elev. prom. 28 no.1:28 Ja '62. (MIRA 16:7)

1. Direktor Belgorod-Dnestrovskoy realizatsionnoy bazy (for Kratov). 2. Direktor Kanayevskogo khlebopriyemnogo punkta Penzenskoy obl. (for Karavanov).
(Grain)

KRATOV, F., inzh.

Continuous line of corn processing at the Belgorod-Dnestrovskiy Milling Combine. Muk.-elev. prom. 29 no.12:7-8 D '63. (MIRA 17:3)

1. Belgorod-Dnestrovskiy kombinat khleboproduktov.

KRATS, K.O.

Some problems on Proterozoic geology and the structure of the Baltic shield. Trudy Lab.geol.dokem.no.5:175-188 '55.
(Baltic Sea region--Geology) (MLRA 9:1)

BOR[illegible], P.A.; KRATS, K.O.

Trends and results of investigations of the Department of Geology of the Karelian Branch of the Academy of Sciences of the U.S.S.R. Izv. Kar. i Kol' fil. AN SSSR no. 1:35-42 '57. (MIRA 11:7)

1. Otdel geologii Karel'skogo filiala AN SSSR.
(Karelia--Geological research)

KRATS, K.O.

Jotnian basic rocks in southern Karlia and the formation of titanomagnetite in them. Trudy Kar. fil. AN SSSR no.11:233-240 '59. (MIRA 13:2)

(Karelia--Titanomagnetite)

BISKE, Galina Sergeyevna; KRATS, Kauko Ottovich; BORISOV, P.A., nauchnyy red.; SHEKHTER, D.I., red.; SHEVCHENKO, L.V., tekhn. red.

[Geology field trips in the vicinity of Petrozavodsk] Geologicheskie ekskursii v okrestnosti Petrozavodska. Petrozavodsk, Gos. izd-vo Katel'skoi ASSR, 1961. 86 p. (MIRA 14:8)
(Petrozavodsk region—Geology—Field work)

KRATS, Kauko Ottovich; POLKANOV, A.A., akademik, glavnyy i otv.red. [deceased]; DOLMATOV, P.S., red.izd-va; VINOGRADOVA, N.F., tekhn. red.

[Geology of Karelian folding in Karelia] Geologiia karelid Karelii. Moskva, Izd-vo Akad.nauk SSSR, 1963. 209 p. (Akademiia nauk SSSR. Laboratoriia geologii dokembriia. Trudy, no.16). (MIRA 16:2)

(Karelia—Folds (Geology))

OBRUCHEV, S.V., otv. red.; VELIKOSLAVINSKIY, D.A., red.; KELLER, B.M., red.; KRATS, K.O., red.; NEYELOV, A.N., red.; PAVLOVSKIY, Ye.V., red.; POLOVINKINA, Yu.Ir., red.; SEMENKO, N.P., red.; SALOP, L.I., red.

[Pre-Cambrian geology] Geologiia dokembriia. Moskva, Nedra, 1964. 284 p. (Its Doklady sovetskikh geologov. Problema 10) (MIRA 17:8)

1. International Geological Congress. 22d, 1964.

KRATS, L., inzhener-konstruktor; KLOKOVSKIY, M.

Consolidate business connections. NTO 2 no.7:57 Jl '60. (MIRA 13:7)

1. Uchenyy sekretar' soveta Nauchno-tekhnicheskogo obshchestva vodnogo transporta na Leningradskom zavode rezinovykh tekhnicheskikh izdeliy (for Klokovskiy).
(Leningrad--Shipyards)

KLOKOVSKIY, N.; KRATS, L.

Pneumatic-tube transportation in foundries. NTO 3 no.8:59 Ag '61. (MIRA 14:9)

1. Uchenyy sekretar' soveta Nauchno-tekhnicheskogo obshchestva Kanonerskogo sudoremontnogo zavoda (for Klokovskiy). 2. Chlen Nauchno-tekhnicheskogo obshchestva Kanonerskogo sudoremontnogo zavoda (for Krats).
(Pneumatic-tube transportation)

KRALIK, J.; KORHON, M.; KRATSCHMER, J.

Replacement of the esophagus by a tube from the fundus of the stomach with an artificial neocardia. Cas. lek. Cesk. 104 no.42:1167 22 O '65.

KRATSER, M.B., inzhener; PROVINTZYEV, I.V., inzhener.

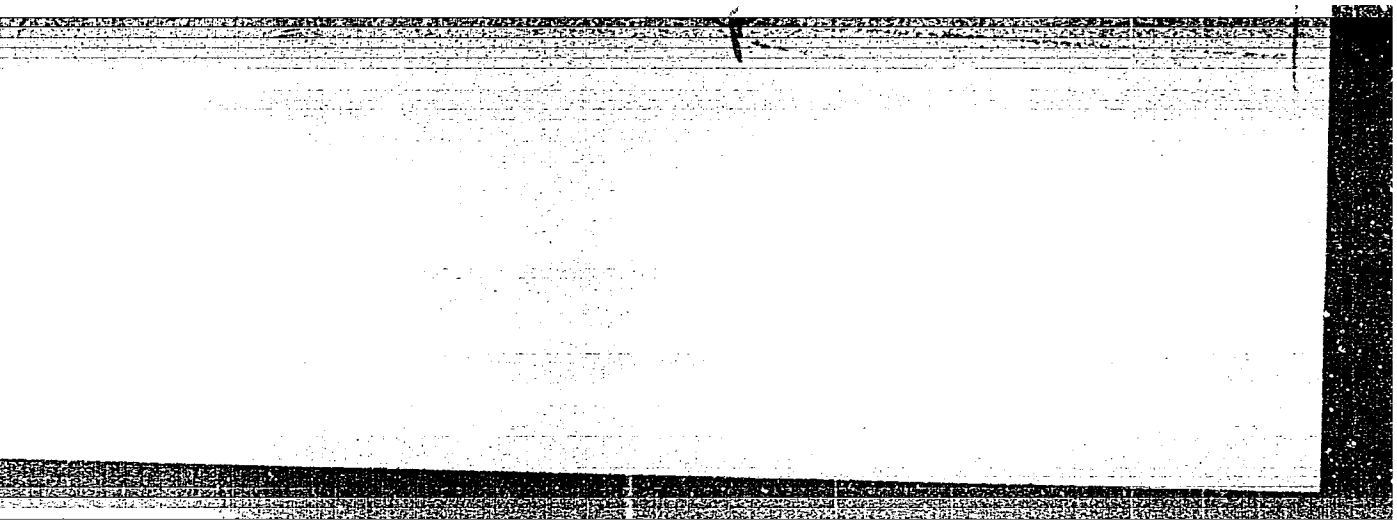
New water insulating material PKP. Stroi.prom. 32 no.6:40-42 Je '54.
(MLRA 7:6)

(Roofing) (Waterproofing)

KRATSIK, B.

Distr: 4E3d/4E3c

8219. STUDY OF [illegible]
M.P. [illegible], E.P. Grigor'ev, A.V. Zolotavin and B. Kratsik.
Dokl. Akad. Nauk SSSR, Vol. 118, No. 6, 1127-30 (1958). In [illegible]
The [illegible] spectrum, the [illegible] of conversion electrons, and that of photoelectrons [illegible] radioactive [illegible] were measured using a double-focusing spectrometer.



APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000826220

Kretsik, B.

Arsenic-76 radiation. E. P. Grigor'ev, L. V. Gustova, A. V. Zolotavin, B. Kratsik, T. V. Puleshchuk, and O. V. Chubinskii. *Vestnik Leningrad. Univ.* 12, No. 10, *Ser. Fiz. i Khim.* No. 2, 37–9(1957).—The β- and γ-radiation from As^{76} was investigated by means of a β- and γ-spectrometer. Five components were found in the β-spectrum with end-point energies of 350, 880, 1760, 2410, and 2960 e.kv., and relative intensities of 4, 8, 7, 28, and 68, resp. The conversion coeff. of the 553-e.kv. transition was found to be 1.75×10^{-3}. The ratios $\gamma_{553}:\gamma_{559}:\gamma_{1185} = 3.6:1.1:1.0$ were established from photoelectron measurements. γ-Rays were observed with energies of 1.21, 1.43, 1.76, 2.10, 2.42, and 2.65 m.e.v. and relative intensities of 1.0, 0.1, 0.07, 0.14, 0.006, and 0.006, resp. A. Kremheller

KRATSIK, B.

20-1-13/42

AUTHORS: Grigor'yev, Ye.P., Dzhelepov, B. S., Corresponding Member of the AN SSSR, Zolotavin, A. V., Kratsik, B., Preobrazhenskiy, B. K., Yanchevskaya, I. S.

TITLE: The Conversion Spectrum of Ho^{160} (Konversionnyy spektr Ho^{160}).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 1, pp. 53 - 56 (USSR)

ABSTRACT: The present paper investigates the conversion spectrum occurring in the radioactive transformation Er^{160} Ho^{160} Dy^{160}. The spectrum was investigated by means of a spectrometer with a double focusing. The conversion spectrum is homogeneous in both fractions: Er^{160} does not produce any conversion electrons and all the electrons belong to the Ho^{160}. The results of the investigations of the conversion spectrum are given in a table. The intensity of all the lines observed decreased in a period corresponding to the half-value period of the investigated fractions: 29 hours in the case of the erbium fraction and 5 hours of the holmium fraction. On measuring faults something is said, too. The general form of the conversion spectrum agrees with an earlier discovered form (reference 2). Moreover, some new facts could be explained, which permit the determination of the decay scheme of the Ho^{160}: The lines L_I+L_{II}, L_{III}, M and N of the transition taking place in the Ho^{160} were observed with 60 KeV. The decomposition into the components makes it possible to determine the relative intensity of the lines. The relationship $L_I:L_{II}:L_{III}$ =

Card 1/2

= o,2:1, 1:1,o determined by the authors for the transition 86,4 keV confirms the multipole property E 2 of which.The line E_e = 99,3 keV discussed in a preparatory paper (reference 2) was identified as the L-line of the transition 1o7 keV by the authors. Moreover the K-conversion line of this transition was found.The conversion line of the transition 298 keV on the K-shell is a narrow doublet with $\Delta E \sim$ 1 keV. Further particulars on these new discovered lines are given.The data given here and the data on the decay of the Tb^{160}(references 7,8,9,1o,11,12)oan be used as fundament for the construction of the decay scheme of Tb^{160} and Ho^{160}.Such a scheme is illustrated by a graph. There are 3 figures, 2 tables, and 12 references, 5 of which are Slavic.

ASSOCIATION: **Physics Institute of the Leningrad State University im. A.A. Zhdanov** (Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta im. A. A. Zhdanova).

SUBMITTED: September 13, 1957

AVAILABLE: Library of Congress

KRATSIK, B

AUTHORS: Grigor'yev, Ye. P., Dzhelepov, B. S., 48-22-2/17
Zolotavin, A. V., Kraft, O. Ye., Kratsik, B., Peker, L. K.

TITLE: The Decay of Tb^{160} and H^{160} and the Level Scheme of Dy^{160} (Raspad Tb^{160} i Ho^{160} i skhema urovney Dy^{160})

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958, Vol. 22, Nr 2, pp. 101-125 (USSR)

ABSTRACT: Radioactive Tb^{160} was here obtained by irradiation with slow neutrons of chemically pure (99,99%) Tb_2O_3. The position and relative intensity of 19 lines was carefully measured in the conversion spectrum. The decomposition of the known line 963 + 966 keV into two components is essentially new. The relative intensities of the γ-transitions were obtained by means of a division of the line areas through the corresponding photoelectric absorption factor. The values were because of the absorption of the γ-rays corrected in the source itself and at the walls of the cylinder, as well as because of the absorption of the photoelectrons in the target and in the slits of the counter. The obtained relative intensities

Card 1/3

of the γ-lines in the spectrum of photoelectrons are in the range of $\pm$20% in agreement with those of references 5 and 6. The measurements of the conversion spectrum show that the soft component is twice as weak as the hard one. The multiplicity of these transitions apparently is equal and between the intensities of the γ-lines the same relation must exist. - Radioactive Ho^{160} was obtained by irradiation of a tantalum target with protons with an energy of up to 660 MeV. The erbium and holmium fractions were chromatographically separated from the target. In the conversion spectrum all conversion lines of Ho^{160} that had been obtained in reference 8 were also confirmed here and many new ones discovered. It is shown that the transitions to the upper levels are permitted ones. The small number of positrons (one positron) per decay is explained by the fact that at the low decay-energy the K-capture is dominating. When the decay to two upper levels is considered permitted K/β^+ can be determined according to the tables by Zweifel (ref. 10). The values 5400 and 400 thus obtained are very high, consequently a considerable part of all conversions of Ho^{160} must take place by way of K-capture. In the

second short chapter the determination of the multiplicity of transitions is shown and its results are given in the form of a table. - In the third chapter the scheme of the Dy^{160}-levels is treated. A level scheme of Dy^{160} was here compiled with the use of all experimental data, theoretical considerations and the analogy with the neighboring nuclei. This scheme in the best manner corresponds to all data. All arguments confirming this scheme are given here and all facts contradicting this scheme or facts which cannot be explained are enumerated. There are 8 figures, 12 tables, and 19 references, 8 of which are Soviet.

ASSOCIATION: Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta im. A. A. Zhdanova (Institute for Physics in the Leningrad State University imeni A. A. Zhdanov)

AVAILABLE: Library of Congress

Card 3/3 1. Terbium-Decay 2. Terbium isotopes (Radioactive)

AUTHORS: Avotina, M. P., Grigor'yev, Ye. P., Zolotavin, A. V., Kratsik, B. 20-119-6-20/56

TITLE: The Radiation From Tb^{160} (Izlucheniye Tb^{160})

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp. 1127-1130 (USSR)

ABSTRACT: The continuous spectrum, the spectrum of conversion electrons and the spectrum of photoelectrons from radioactive Tb^{160} was measured by the authors by means of a spectrometer with double focussing. The sample was produced by irradiation of chemically pure Tb_2O_3 with slow neutrons. The continuous spectrum was examined by means of a source with a thickness of $\sim$1mg/cm^2, which was produced by coating Tb_2O_3 on a mica base with a thickness of $\sim$1,5 mg/cm^2. The results of the measurements are compiled in a table. The conversion spectrum was measured by means of sources with a thickness of from 4 to 5 mg/cm^2. 19 lines were found, pertaining to 11 transitions to Dy^{160}. These results are also compiled in a table.

Card 1/3

The general form of the β-spectrum is illustrated by a figure. The lines pertaining to the transitions to Dy^{160} with the energies 878 and 965 keV are double. These two transitions were also investigated in the decay of Tb^{160}. The line corresponding to the transition with the energy 877 keV is either a single line or its weak component is so soft, that it cannot be separated from the harder line. The relative intensities of the γ-transitions were determined by division of the areas covered by the respective lines by the corresponding coefficient of photoelectronic absorption. The authors compared the relative intensities of some radioactive isotopes (e. g. J^{131}, Sb^{124}) known from publications with the intensities obtained on the basis of the measurements of the photo lines. For the discussed measurements the internal diameter of the source amounts to 0,3 mm. Therefore it should be possible to determine correctly the relative intensities in a wide energy range. The authors attempted the separation of the line 967 keV

into its two components. The results of the measurements prove the existence of two components, the ratio of their intensities, however, could only be roughly estimated: $I_{961}/I_{964} = 1^{+1,0}_{-0,5}$. There are 3 figures, 4 tables, and 2 references, 2 of which are Soviet.

ASSOCIATION: Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta im. A. A. Zhdanova (Physics Institute of Leningrad State University imeni A. A. Zhdanov)

PRESENTED: September 13, 1957, by A. A. Lebedev, Member, Academy of Sciences, USSR

SUBMITTED: September 10, 1957

KRATSIK, B.: Master Phys-Math Sci (diss) -- "Investigation of the irradiation of the radioactive isotopes As-76, Tb-160, and Ho-160 using a spectrometer with double focusing at an angle of -- 2". Leningrad, 1959. 6 pp (Leningrad Order of Lenin State U im A. A. Zhdanov), 150 copies (KL, No 13, 1959, 99)

21(7) SOV/48-23-2-5/20

AUTHORS: Grigor'yev, Ye. P., Zolotavin, A. V., Kratsik, B.

TITLE: Radiation of Tb^{160} (Izlucheniye Tb^{160})

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 2, pp 191-203 (USSR)

ABSTRACT: In the present paper the authors investigated the β-spectrum and the spectra of internal and external conversions of β-transitions accompanying Tb^{160} decay. In addition to experimental data known about Tb^{160} (Refs 1, 2), this paper contains further data on the β-spectrum with thin radiation sources as well as on some transitions between the levels of the Dy^{160} nucleus. Tb_2O_3 with a purity of 99.99% was irradiated in the reactor. Within the individual ranges of energy < 250 kev, 200 - 600 kev, > 600 kev sources with different surface density were used. Data and comparison with results obtained by other authors are contained in table 2. The analysis of the spectrum obtained was performed on the assumption of a Fermi shape and a unique shape of the spectrum according to the method devised by Curie-Richardson-Pakstone. The

Card 1/ 3

authors obtained excitation levels from which β-transitions occurred at 1565, 1358, 1264, 966, 865 kev. The level 1156 kev resulted from the decay of Ho^{160}. Limit energies and relative intensities of the softer components coincide in both analyses. The spectrum of conversion electrons was recorded with the sources applied in recording the β-spectrum. Besides the transitions already obtained an additional one was found at 289 kev. The other resulting energies and intensities are in accordance with those of the β-spectrum. (Table 3). The conversion lines of the transition at 1273 kev were studied and it was found that they are composed of the lines K-1273, L-1273 and K-1314. The spectrum of γ-rays was measured by means of Ag, Au, Bi and Th targets. The conversion coefficients were compared to the theoretical values contained in paper (Refs 14, 19), in which the 1973 kev transition was regarded as an E2 transition. The multipole orders of the individual transitions were determined according to the theoretical and experimental values of α_K.

The theoretical values were adopted from tables published by Sliv and Band (Refs 14, 19). On the basis of the results obtained the decay scheme was established, which was discussed in detail. For the purpose of determining the intensities and intensity equilibria the intensities of transitions into the ground state with $\overline{I}_{\gamma 86} + \overline{I}_{\gamma 966} + \overline{I}_{\gamma 1201} = 100$ were used. There are 5 figures, 9 tables, and 20 references, 11 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos. universiteta im. A. A. Zhdanova
(Scientific Research Institute of Physics of Leningrad State University imeni A. A. Zhdanov)

21(7) SOV/48-23-7-18/31

AUTHORS: Grigor'yev, Ye. P., Dzhelepov, B. S., Zolotavin, A. V., Kratsik, B., Bitterlikh, G.

TITLE: The Decay of Ho^{160} and the Level Scheme of Dy^{160} (Raspad Ho^{160} i skhema urovney Dy^{160})

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 7, pp 868-874 (USSR)

ABSTRACT: In a previous paper (Ref 1), the authors had already determined the level scheme of Dy^{160}, but in considering all factors they come to the result that the upper level does not amount to 1718 kev , but that in the decay of the isotope Ho^{160} excited states with energies up to 2900 kev occur. In the present paper, results of an investigation of the transitions with high levels of the isotope Dy^{160} are put forward. The spectra of the positrons and of the electrons of the internal conversion were recorded by a β-spectrometer. The obtaining of the radioactive sources is dealt with, and the investigation of the β^+-spectrum in the range of weak energies is described. In the range under

Card 1/3

160 kev, a positron excess is observed which is connected with a soft component. The components of the spectrum are shown in a diagram (Fig 1). The balance of the intensities for the transitions in the isotope Ho^{160} shows that the transition with 60 kev amounts to 60% of the decay. It is further concluded that the number of positrons in the decay is equal to 0.36%. The authors found 55 new conversion lines which are compiled in table 2 together with the known lines. The experimental results were compared with the theoretical results, and it became clear that some L-lines are superimposed by K-lines of other transitions. Figures 2 and 3 show two ranges of the spectrum of the conversion electrons, the half-width of these lines is indicated, and it is ascertained that in figure 2 there is a group of lines the identification of which is very difficult. From the results obtained hitherto in this

The Decay of Ho^{160} and the Level Scheme of Dy^{160} SOV/48-23-7-16/31

paper, and in other papers, the extensive level scheme of the isotope Dy^{160} is set up, and the balance of the intensities in Ho^{160} is evaluated. There are 4 figures, 3 tables, and 4 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos. universiteta im. A. A. Zhdanova
(Scientific Research Institute of Physics of the Leningrad State University imeni A. A. Zhdanov)

Card 3/3

BRABETS, V. [Brabec, V.]; KRATSIK, B.; KRATSIKOVA, T.; MILIGI, Z.; VEYS, M.; MASHTALKA, A.; VOBETSKY, M.; GNATOVITSZ, V.

Radioactive radiation from neutron-deficient hafnium isotopes. Izv.AN SSSR.Ser.fiz. 25 no.10:1266-1268 '61. (MIRA 14:10)

1. Institut yadernykh issledovaniy Chekhoslovatskoy Akademii nauk, Rzhezh, i Fakul'tet tekhnicheskoy i yadernoy fiziki ChVUT, Praga. (Hafnium--Isotopes)

S/048/62/026/012/006/016
B117/B186

AUTHORS: Brabets, V., Kratsik, B., Kratsikova, T., Mashtalka, A., Veys, M., Vobetski, M., and Chernukh, I.

TITLE: Conversion spectrum of Hf^{172}

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 12, 1962, 1486 - 1487

TEXT: The long-lived hafnium isotope Hf^{172} of $T_{1/2}$ = 5 years was obtained in the synchrocyclotron of the OIYaI in Dubna by bombarding a tantulum target with protons for a month. The hafnium fraction was separated from the target using the method described by M. Vobecký and A. Mastalka (Collection Czechoslov. Chem. Commun., 26, 1716 (1961)). The conversion spectrum of the hafnium fraction was measured with a β-spectrometer having an intermediate image and a 2% resolution, 7 months after irradiation had been completed. By this time the short-lived isotope had decayed completely and the Hf^{175}, of $T_{1/2}$ = 70 days to a considerable extent. The source of radiation used for most of the experiments was an equilibrium mixture of

Card 1/3

S/048/62/026/012/006/016
B117/B186

Conversion spectrum of Hf^{172}

Hf^{172} and Lu^{172} on aluminum foil. Measurements carried out in the range up to 1100 kev showed that Hf^{172} has no conversion lines above 120 kev. In the range up to 120 kev, 11 lines were found, corresponding to transitions with energies of 23.6, 42, 44.5, 81.1, 112.7, and 125.5 kev. The γ-transition with an energy of 112.7 kev is already known from the decay of Lu^{172}. The increase in intensity of the conversion line corresponding to this transition took place more slowly than that of the other conversion lines of Lu^{172}. This leads to the conclusion that there exist conversion lines belonging to Hf^{172} at this position in the spectrum, which also correspond to a transition having an energy of about 112.7 kev. As a result of the incomplete separation of the individual lines, the relative intensities of the conversion lines in question could only be determined approximately. For the same reason, it was impossible either to determine the multipole order of the γ-transition unambiguously, or to propose a final decay scheme. This paper was read at the 12th Annual Conference on Nuclear Spectroscopy held in Leningrad from January 26 through February 2, 1962. There is 1 table.

Card 2/3

Conversion spectrum of Hf^{172}

S/048/62/026/012/006/016
B117/B186

ASSOCIATION: Institut yadernykh issledovaniy Chekhoslovatskoy akademii nauk, Rzhezh (Institute of Nuclear Research of the Czechoslovak Academy of Sciences, Rzhezh); Fakul'tet tekhnicheskoy i yadernoy fiziki ChVUT (Division of Technical and Nuclear Physics ChVUT)

Card 3/3

BRABETS, V. [Brabec, V.]; KRATSIK, B.; KRATSIKOVA, T.; MILIGI, Z.; VEYS, M.; MASHTALKA, A.; VOBETSKY, M.; GNATOVITSZ, V.

Radioactive radiation from neutron-deficient hafnium isotopes. Izv.AN SSSR.Ser.fiz. 25 no.10:1266-1268 '61. (MIRA 14:10)

1. Institut yadernykh issledovaniy Chekhoslovatskoy Akademii nauk, Rzhezh, i Fakul'tet tekhnicheskoy i yadernoy fiziki ChVUT, Praga. (Hafnium--Isotopes)

S/048/62/026/012/006/016
B117/B186

AUTHORS: Brabets, V., Kratsik, B., Kratsikova, T., Mashtalka, A., Veys, M., Vobetski, M., and Chernukh, I.

TITLE: Conversion spectrum of Hf^{172}

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 12, 1962, 1486 - 1487

TEXT: The long-lived hafnium isotope Hf^{172} of $T_{1/2}$ = 5 years was obtained in the synchrocyclotron of the OIYaI in Dubna by bombarding a tantulum target with protons for a month. The hafnium fraction was separated from the target using the method described by M. Vobecký and A. Mastalka (Collection Czechoslov. Chem. Commun., 26, 1716 (1961)). The conversion spectrum of the hafnium fraction was measured with a β-spectrometer having an intermediate image and a 2% resolution, 7 months after irradiation had been completed. By this time the short-lived isotope had decayed completely and the Hf^{175}, of $T_{1/2}$ = 70 days to a considerable extent. The source of radiation used for most of the experiments was an equilibrium mixture of

Card 1/3

S/048/62/026/012/006/016
B117/B186

Conversion spectrum of Hf^{172}

Hf^{172} and Lu^{172} on aluminum foil. Measurements carried out in the range up to 1100 kev showed that Hf^{172} has no conversion lines above 120 kev. In the range up to 120 kev, 11 lines were found, corresponding to transitions with energies of 23.6, 42, 44.5, 81.1, 112.7, and 125.5 kev. The γ-transition with an energy of 112.7 kev is already known from the decay of Lu^{172}. The increase in intensity of the conversion line corresponding to this transition took place more slowly than that of the other conversion lines of Lu^{172}. This leads to the conclusion that there exist conversion lines belonging to Hf^{172} at this position in the spectrum, which also correspond to a transition having an energy of about 112.7 kev. As a result of the incomplete separation of the individual lines, the relative intensities of the conversion lines in question could only be determined approximately. For the same reason, it was impossible either to determine the multipole order of the γ-transition unambiguously, or to propose a final decay scheme. This paper was read at the 12th Annual Conference on Nuclear Spectroscopy held in Leningrad from January 26 through February 2, 1962. There is 1 table.

Card 2/3

Conversion spectrum of Hf^{172}

S/048/62/026/012/006/016
B117/B186

ASSOCIATION: Institut yadernykh issledovaniy Chekhoslovatskoy akademii nauk, Rzhezh (Institute of Nuclear Research of the Czechoslovak Academy of Sciences, Rzhezh); Fakul'tet tekhnicheskoy i yadernoy fiziki ChVUT (Division of Technical and Nuclear Physics ChVUT)

Card 3/3

KRATSKOVSKIY, S.N.

Krasnosel'skiĭ, S. N., and Gol'dman, M. A. On the principal part of a completely continuous operator. Doklady Akad. Nauk SSSR (N.S.) 70, 9[illegible] (1950). (Russian)

Let $\mathfrak{A}$ be a completely continuous operator in Hilbert space H, $\mathfrak{A}(H)\subseteq H$. An eigenspace corresponding to an eigenvalue λ of $\mathfrak{A}$ is finite-dimensional and is spanned by a canonical system of vectors $x_1, \cdots, x_k$ with $\lambda\mathfrak{A}x_1=x_1$, $\lambda\mathfrak{A}x_2=x_2+x_1, \cdots, \lambda\mathfrak{A}x_k=x_k+x_{k-1}$. The author represents $\mathfrak{A}$ as the sum of two completely continuous operators $\mathfrak{A}=\mathfrak{A}_1+\mathfrak{A}_2$, where $\mathfrak{A}_1$ has the same eigenvalues and the same canonical systems as $\mathfrak{A}$ has, and $\mathfrak{A}_2$ has no eigenvalues; $\mathfrak{A}_1(H)\subseteq L$ where L is spanned by all eigenspaces of $\mathfrak{A}$, $\|\mathfrak{A}_1\|\leq\|\mathfrak{A}\|$, $\|\mathfrak{A}_2\|\leq\|\mathfrak{A}\|$, $\mathfrak{A}_2\mathfrak{A}_1=0$. The operator $\mathfrak{A}_1$ is termed the principal part of $\mathfrak{A}$. The resolvent of the principal part of $\mathfrak{A}$ is the principal part of the resolvent of $\mathfrak{A}$. Some other properties of the principal part are proved.

O. M. Nikodým (Gambier, Ohio).

Source: Mathematical Reviews, 1950 Vol 11 No. 8

KRATSMAR-SMOGROVIČ, J.

Some complex salts of beryllium and organic acids. Ju. Krasteg and J. Kratsmar-Smogrovič (Slovenská Univ., Bratislava, Czech.). Chem. Zvesti 7, 421-8(1953).—Complex Be salts of the type $Be_4O(RCO_2)_6$ are prepd. by dissolving $Be(OH)_2$ in boiling alc. soln. of org. acids according to $4BeO(OH)_2 + 6RCO_2H = Be_4O(RCO_2)_6 + 7H_2O$. $BzOH$ gives $Be_4O(C_6H_5CO_2)_6$ (I), m. 316-7°, identical with the basic Be benzoate described in the literature. I with 2-thiophenecarboxylic acid gives $Be_4O(C_4H_3SCO_2)_6$, m. 391-2°; with 2-furancarboxylic acid, $Be_4O(C_4H_3OCO_2)_6$, m. 368-70°; with o-$O_2NC_6H_4CO_2H$, $Be_4O(o$-$O_2NC_6H_4CO_2)_6$, m. 379-80°; with m-$O_2NC_6H_4CO_2H$, $Be_4O(m$-$O_2NC_6H_4CO_2)_6$, m. 378-80°; with p-$O_2NC_6H_4CO_2H$, $Be_4O(p$-$O_2NC_6H_4CO_2)_6$, m. 410-12°.

Jan Micka

CZECHOSLOVAKIA/Inorganic Chemistry. Complex Compounds. C

Abs Jour: Ref Zhur-Khim., No 15, 1958, 49810.

Author : Krasnec L., Kratsmar-Smogrovic J., Pivoda A.
Inst :
Title : Chelate Salts of Beryllium With Organic Acids of the $Be_4O(R-CO_2)_6$ Type.

Orig Pub: Chem. zvesti, 1957, 11, No 10, 575-578.

Abstract: Chelate salts of Be with alpha- and beta-naphthoic acid have been prepared: Be_4O (alpha-$C_{10}H_7COO)_6$, MP 246.5°, Be_4O (beta-$C_{10}H_7$-COO)$_6$, MP 335.5-336.5°, and $2Be_4O$ (beta-$C_{10}H_7COO)_6$. $\cdot 3C_6H_5CH_3$, MP 335.5-336.5°. -- V. Shtern.

Card : 1/1

KRATSMAR-SMOGROVIC, Juraj, doc. dr. PhMr. CSc. (Bratislava, Kalinciakova 8)

Chelate complexes of beryllium. Pt.1. Acta pharmac 9: 63-91 '64.

1. Chair of Inorganic and Organic Chemistry of the Faculty of Pharmacy, Bratislava.

KRATSMAR-SMOGROVIC, Juraj, doc. dr. [illegible] Bratislava, Kalinciakova 8);
PIVODA, Alojz

Reactions of the hexakispropionato-m-oxo-tetraberyllium complex with monochloroacetic acid and benzoic acid. Acta pharmac 9: 93-97 '64.

1. Chair of Inorganic and Organic Chemistry of the Faculty of Pharmacy, Bratislava.

L 31395-66 EWP(j) RM
ACC NR: AP6021112 SOURCE CODE: CZ/0043/65/000/012/0881/0891

AUTHOR: Kratsmar-Smogrovic, Juraj--Krochmar-Shmogrovich, Yu. (Docent; Doctor; Pharmacist; Candidate of sciences; Bratislava); Jokl, Vladimir--Yokl, V. (Docent; Doctor of natural sciences; Pharmacist; Candidate of sciences; Bratislava) 39 37 B

ORG: Department of Inorganic and Organic Chemistry, Pharmaceutical Faculty, Comenius University, Bratislava (Katedra anorganickej a organickej chemie Farmaceutickej fakulty Univerzity Komenskeho); Department of Analytical Chemistry, Pharmaceutical Faculty, Comenius University, Bratislava (Katedra analytickej chemie Farmaceutickej fakulty Univerzity Komenskeho)

TITLE: Complex compounds of Cu with organic ligands (I). Contribution to the chemistry of coppersalicylate complexes

SOURCE: Chemicke zvesti, no. 12, 1965, 881-891

TOPIC TAGS: spectrophotometry, electrophoresis, organocopper compound, crystallization, dehydration

ABSTRACT: At pH 4 the dihydrate of Di(salicylate)diaquo-Cu^{II} complex is formed; the compound does not form chelates. When the concentration of the raw materials is high enough, the compound crystallizes out of the solution. The molar concentration of a saturated water solution of the dihydrate of the di(salicylate)-diaquo-Cu^{II} complex is $2.46.10^{-2}$ at 20°C, and $6.82.10^{-2}$ at 50°C.

Card 1/2

L 31395-66
ACC NR: AP6021112

The compound loses water at atmospheric temperatures; at 85-90°C complete dehydration takes place; the process is reversible. The composition of the compound was investigated by paper electrophoresis and spectrophotometry; the product is stable at pH 6-7.

The authors thank Graduate Physicist T. Obert for help in measuring the absorption spectrum and Graduate Pharmacist V. Hartolov for the elementary analysis. Orig. art. has: 3 figures and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 24Aug65 / ORIG REF: 004 / OTH REF: 012
SOV REF: 001

Card 2/2 CC

L 31394-66 EWP(j) RM
ACC NR: AP6021113 SOURCE CODE: CZ/0043/65/000/012/0892/0899

AUTHOR: Kratsmar-Smogrovic, Juraj--Krochmar-Shmogrovich, Yu. (Docent; Doctor; Pharmacist; Candidate of sciences; Bratislava); Gulkova, Olga--Gulkova, O. (Engineer; Bratislava); Lucanska, Brigita--Luchanska, B. (Graduate pharmacist; Bratislava); Blahova, Maria--Blagova, M. (Graduate pharmacist; Bratislava)

ORG: Department of Inorganic and Organic Chemistry, Pharmaceutical Faculty, Comenius University, Bratislava (Katedra anorganickej a organickej chemie Farmaceutickej fakulty Univerzity Komenskeho)

TITLE: Complex compounds of Cu with organic ligands (II). Copper-o-crosotinate complexes

SOURCE: Chemicke zvesti, no. 12, 1965, 892-899

TOPIC TAGS: organocopper compound, ion, spectrophotometry, ethanol, water, chemical precipitation

ABSTRACT: Reaction of Cu^{II} ions with cresotinic ions in water solutions precipitates the trihydrate salt of $Cu_2(C_8H_7O_3)_4$. The compound is also formed by the action of o-cresitinic ions upon water solutions of Bis(salicylate)-diaquo-Cu^{II} complexes. The substitution of the salicylate ion by the cresotinic ion was comfirmed spectrophotometrically. The molecular ligands water

Card 1/2

L 31394-66
ACC NR: AP6021113

2

and ethanol are more strongly bound in the isolated complexes than in the original salicylate complex. These ligands are liberated only at 100°C and at pressures of 20-30 torr. The authors thank Graduate Physicist T. Obert for help in measuring the absorption spectrum and Graduate Pharmacist V. Hartelov for conducting the elementary analysis. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 24Aug65 / ORIG REF: 002 / OTH REF: 004
SOV REF: 001

Card 2/2 CC

KRATSOV, A. I.

FA 50/49T84

USSR/Mining May 49
Coal
Gas

"Review of Article by N. S. Popov; 'Donbas Must Have a Map of the Gas Contents of Coal Layers,' and of G. D. Lidin's Memorandum, Engineer N. S. Popov's Proposal,'" A. I. Kratsov, 1 p

"Ugol'" No 5

Calls Popov's article a timely airing of an important problem. Its solution is necessary for further development of the coal industry. Since Donbas mines have reached 1,000 meters, it is difficult to compile a comprehensive map of

50/49T84

USSR/Mining (Contd) May 49

gas content in coal strata. Disagrees with some of Lidin's comments.

50/49T84

BISKE, G.S.; KRATTS, K.O., redaktor; NEVEL'SHTEYN, V.I., redaktor; TULINA, M.P., redaktor; PEVZNER, R.S., tekhnicheskiy redaktor.

[Eskars of Karelia] Ozy Karelii. Moskva, Izd-vo Akademii nauk SSSR, 1955. 28 p. (MLRA 8:11)
(Karelia--Eskar)

15-1957-12-18002

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12, p 201 (USSR)

AUTHOR: Kratts, K. O.

TITLE: Some Aspects of Proterozoic Geology and Structure of the Baltic Shield (O nekotorykh voprosakh geologii proterozoya i stroyeniya Baltiyskogo shchita)

PERIODICAL: Tr. Labor. geologii dokembriya AN SSSR, 1955, Nr 5, pp 175-188

ABSTRACT: Bibliographical entry

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KRATTS, K.O.

Genesis of igneous titanomagnetite deposits. Trudy Lab. geol. dokan. no.7:5-21 '57. (MIRA 11:3)
(Karelia--Titanomagnetite)

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Stratigraphic correlation and terminology of the Proterozoic in Karelia. Izv. Kar. i Kol'. fil. AN SSSR no.2:9-15 '58.
(MIRA 11:9)

1.Otdel regional'noy geologii Karel'skogo filiala AN SSSR.
(Karelia--Geology, Stratigraphic)

KRATTS, K.O.; SOKOLOV, V.A.; BISKE, G.S.

Professor Petr Alekseevich Borisov. Izv. Kar. i Kol'. fil. AN SSSR no.2:3-8 '58. (MIRA 11:9)

(Borisov, Petr Alekseevich, 1878-)

DEMIDOV, N.F.; KRATTS, K.O.

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1. Otdel regional'noy geologii Karel'skogo filiala AN SSSR.
(Karelia--Shale)

KRATTS, K.O.

Discussing problems related to the absolute age of Karelian formations. Trudy Lab.geol. dokem. no.9:42-47 '59. (MIRA 13:11)
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KRATTS, K.O.

Pre-Quaternary characteristics of the eastern part of the Baltic Shield. Trudy Lab.geol dokem. no.9:68-74 '59. (MIRA 13:11)
(Baltic Shield--Geology, Stratigraphic)

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[Outline of the geology and mineral resources of Karelia] Ocherk geologii i poleznykh iskopaemykh Karelii. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR, 1961. 64 p. (MIRA 15:10)

(Karelia--Geology)

GERLING, Erik Karlovich. Prinimali uchastiye: YASHCHENKO, M.L., starshiy nauchnyy sotrudnik; YERMOLIN, G.M., starshiy nauchnyy sotrudnik; TITOV, N.Ye., mladshiy nauchnyy sotrudnik; AFANAS'YEVA, L.I., mladshiy nauchnyy sotrudnik; KOL'TSOVA, T.V., mladshiy nauchnyy sotrudnik; OVCHINNIKOVA, G.V., mladshiy nauchnyy sotrudnik; SHUKOLYUKOV, Yu.A., mladshiy nauchnyy sotrudnik; LEVSKIY, L.K., mladshiy nauchnyy sotrudnik; MOROZOVA, K.M., mladshiy nauchnyy sotrudnik; MATVEYEVA, I.I., mladshiy nauchnyy sotrudnik; BARKAN, V.G., mladshiy nauchnyy sotrudnik; BARANOVSKAYA, N.V., mladshiy nauchnyy sotrudnik; VARSHAVSKAYA, E.S., mladshiy nauchnyy sotrudnik; SERGEYEV, A.N., starshiy laborant; KURBATOV, V.V., starshiy nauchnyy sotrudnik; KRATTS, K.O., kand.geol.-mineral.nauk, otv.red.; ARON, G.M., red.izd-va; BOCHEVER, V.T., tekhn.red.

[Present status of the argon method for age determination and its use in geology] Sovremennoe sostoianie argonovogo metoda opredeleniia vozrasta i ego primenenie v geologii. Moskva, Izd-vo Akad.nauk SSSR, 1961. 130 p. (MIRA 14:12)

1. Radiyevyy institut im. V.G.Khlopina (for Kurbatov).
(Geological time) (Radioargon dating)

POLKANOV, A.A.[deceased]; KRATZ, K.O.; SHERBAK, N.I.

Pre-Quaternary geology of Karelia and the Kola Peninsula.
Trudy Lab. geol. dokem. no.19[illegible] '64 (MIRA 17:8)